

## **REMARKS**

Claims 1-5 and 8-12 are currently pending in the application.

### **I. Claim Rejections under 35 U.S.C. § 103(a)**

Claims 1-5 and 8-12 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Taniai et al. (US 5,438,665) in view of Johnson (US 6,834,315). Applicants kindly request that the Examiner reconsider this rejection in view of the following remarks.

Claim 1, as amended, recites the following features:

(i) a transfer criterion judgment unit operable to determine which of the received transfer requests to set as a focus request based on a predetermined transfer criterion, the focus request being a transfer request to be processed next;

(ii) a management information judgment unit operable to judge whether or not the focus request is a transfer request for management information, the management information being information to manage a file, and on judging that the focus request is a transfer request for management information, judge with reference to the processing order whether or not a transfer request for management information exists before the focus request; and

(iii) a request judgment unit operable to: (1) judge with reference to the processing order whether or not a transfer request having type information identical to the type information of the focus request exists before the focus request; (2) specify data relating to the focus request as a transfer target when the management information judgment unit judges that a transfer request for management information does not exist before the focus request; and, (3) set a transfer request for management information closest to the focus transfer request, as the focus request, when the

management information judgment unit judges that a transfer request for management information exists before the focus request.

Applicants respectfully submit that Taniai and Johnson do not teach or suggest the above-noted features recited in amended claim 1.

Regarding Taniai, Applicants note that this reference discloses that data is transferred in accordance with the order of generating transfer requests (which is the same order of receiving transfer requests) (see col. 2, line 56 through col. 3, line 15). Accordingly, in Taniai, because data is not transferred in a different order from the generating order of the transfer requests, Applicants respectfully submit that Johnson clearly does not disclose, suggest or otherwise render obvious the above-noted “management information judgment unit” and “request judgment unit” recited in claim 1.

Regarding Johnson, Applicants note that this reference discloses a method for managing I/O requests, in which a determination is made regarding a priority associated with each I/O request, with the priority being either a first priority or a second priority (see col. 1, lines 50-55). In this regard, as disclosed in Johnson, if the priority of the I/O request is determined to be the first priority, then the I/O request is transmitted, and if the priority of the I/O request is determined to be the second priority, the transmittal of the I/O request is deferred if there are I/O requests of the first priority currently pending (see col. 1, lines 55-58 and col. 2, lines 7-12).

Thus, in Johnson, the processing order of I/O requests is controlled solely according to the priority of the requests. In contrast, Applicants note that according to the features set forth in

claim 1, the processing order of the transfer requests is not controlled solely according to the priority of the requests.

To this end, Applicants provide the following example for the Examiner's reference. Suppose the larger a value of a priority is, the higher the priority is, and transfer requests are issued in the following order: "priority 1, transfer request for data body A1", "priority 2, transfer request for data body A2", "priority 1, transfer request for management information A3", "priority 2, transfer request for data body A4", and "priority 2, transfer request for management information A5".

In this example, according to the method disclosed in Johnson, only the priorities are used to control the processing order of the transfer requests. Thus, in Johnson, the transfer requests would be processed in the order of A2, A4, A5, A1 and A3. As such, in Johnson, the management information regarding the transfer request A5 to be updated later is overwritten with the management information regarding the transfer request A3 to be updated earlier.

In contrast, according to claim 1, the focus request is a transfer request that is to be processed next, and the management information is information for managing files. Thus, according to claim 1, in addition to the transfer criteria (e.g., priority), the type information of a transfer request is also used to control the processing order of the requests.

In other words, while claim 1 utilizes **transfer criteria (e.g. priority) and type information** in order to control the processing order of transfer requests, Johnson discloses that the processing order of the I/O requests is based solely on the priority.

Consider once again the example described above, and suppose the larger a value of a

transfer criterion, the more preferentially a transfer request is transferred, and transfer requests are issued in the following order: “transfer criterion 1, transfer request A1 for data body”, “transfer criterion 2, transfer request for data body A2”, “transfer criterion 1, transfer request for management information A3”, “transfer criterion 2, transfer request for data body A4”, and “transfer criterion 2, transfer request for management information A5”.

In this example, using the above-noted features set forth in claim 1, Applicants note that since the transfer criteria (e.g., priority) and the type information of the transfer requests are used to control the processing order of the transfer requests, that the transfer requests are processed in the order of A2, A4, A1, A3 and A5. As is evident from this processing order, the transfer requests for the management information are processed in the issuance order. Accordingly, by utilizing the features set forth in claim 1, the management information regarding the transfer request A5 that is to be updated later is prevented from being overwritten with the management information regarding the transfer request A3 that is to be updated earlier.

Thus, by providing the above-noted features set forth in claim 1, if management information for recording files and management information for dubbing files are stored in the same area, the management information is updated in the order in which it was issued by the file system. Accordingly, the management information regarding the transfer request A5 to be updated later is prevented from being overwritten with the management information regarding the transfer request A3 to be updated earlier.

Based on the foregoing, Applicants respectfully submit that because the processing order of the I/O requests in Johnson is based solely on the priority of the requests, that Johnson does

not disclose, suggest or otherwise render obvious the above-noted features recited in claim 1 of:

(i) a transfer criterion judgment unit operable to determine which of the received transfer requests to set as a focus request based on a predetermined transfer criterion, the focus request being a transfer request to be processed next;

(ii) a management information judgment unit operable to judge whether or not the focus request is a transfer request for management information, the management information being information to manage a file, and on judging that the focus request is a transfer request for management information, judge with reference to the processing order whether or not a transfer request for management information exists before the focus request; and

(iii) a request judgment unit operable to: (1) judge with reference to the processing order whether or not a transfer request having type information identical to the type information of the focus request exists before the focus request; (2) specify data relating to the focus request as a transfer target when the management information judgment unit judges that a transfer request for management information does not exist before the focus request; and, (3) set a transfer request for management information closest to the focus transfer request, as the focus request, when the management information judgment unit judges that a transfer request for management information exists before the focus request.

In view of the foregoing, Applicants respectfully submit that Taniai and Johnson do not teach, suggest or otherwise render obvious the above-noted combination of features recited in amended claim 1. Accordingly, Applicants submit that claim 1 is patentable over the cited prior art, an indication of which is kindly requested. Claims 2-5 and 8-10 depend from claim 1 and are

therefore considered patentable at least by virtue of their dependency.

Regarding claims 11 and 12, Applicants note that each of these claims recites the features of determining which of the receiving transfer requests to set as a focus request based on a predetermined transfer criterion, the focus request being a transfer request to be processed next; judging whether or not the focus request is a transfer request for management information, the management information being information to manage a file, and when the focus request is a transfer request for management information, judging with reference to the processing order whether or not a transfer request for management information exists before the focus request; judging with reference to the processing order whether or not a transfer request having type information identical to the type information of the focus request exists before the focus request and specifying data relating to the focus request as a transfer target on judging that a transfer request for management information does not exist before the focus request; and setting a transfer request for management information closest to the focus transfer request, as the focus request, on judging that a transfer request for management information exists before the focus request

For at least similar reasons as discussed above with respect to claim 1, Applicants respectfully submit that the combination of Taniai and Johnson does not teach, suggest or otherwise render obvious at least the above-noted features recited in claims 11 and 12.

Accordingly, Applicants submit that claims 11 and 12 are patentable over the cited prior art, an indication of which is kindly requested.

## II. Conclusion

In view of the foregoing amendments and remarks, all of the claims now pending in this application are believed to be in condition for allowance, an indication of which is kindly requested. Should the Examiner believe that there are any remaining issues that must be resolved before this application can be passed to issue, it is respectfully requested that the Examiner contact the undersigned by telephone in order to resolve such issues.

Respectfully submitted,

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